

REMARKS

Canceled claims 1-15 and 17-18 will be subsequently pursued via continuation.

Regarding the objection to claim 16, Applicants amend claim 16 herein as suggested to remedy the objection.

5 Regarding the rejection of claim 16 under 35 U.S.C. 101, Applicants amend claim 16 herein to clarify that the invention produces a tangible result, e.g. materialized query results, as described on page 14 line 21 of the specification for example, or page 15 line 17 et seq. This result is produced either by a particular query execution plan (as described on page 12 line 18 for example of the specification) or by a re-optimized query plan, as claimed. The steps of suspending query
10 execution, re-optimizing the query, and restarting query execution with a re-optimized query plan are not abstract but instead are specific, concrete steps selectively carried out by the invention upon carrying out the step of determining that continued execution of a particular query execution plan is not worthwhile. The real world value of the invention is in the generation of query results in an accelerated manner.

15 Regarding the rejection of claim 16 under 35 U.S.C. 112, first paragraph, Applicants respectfully traverse the rejection. The invention computes the difference between estimated optimization parameter values and actual optimization parameter values at a given checkpoint to determine the significance of parameter estimation errors. This computation is performed in several steps, as claimed, including:

- 20 - pushing the checkpoint below a materialization point for subsequent execution,
 - transferring each row to its parent operator in a pipelined manner,
 - storing identifiers of all rows returned on a side table using an INSERT plan operator just below the return operator, then
 - compensating for returned row results by executing an anti join between the side table
25 and a new result stream

All of these steps are indeed taught in the specification. Page 6 line 21 through page 7 line 13 of the

specification describes a variety of embodiments of the present invention, including an embodiment that performs "eager checking with deferred compensation", which is the embodiment claimed in claim 16, and includes precisely the steps given in claim 16. This rejection is thus overcome.

Regarding the rejection of claim 16 under 35 U.S.C. 112, second paragraph, a number of
5 antecedent basis issues are resolved by amendment of claim 16 herein.

All pending claims are believed to be allowable as amended.

Respectfully submitted,

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